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CERTIFICATE OF MAILING 37 C.F.R. 1.8

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231, on the date below:

7/29/02

&ignature

AUG 0 5 2002

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: DANIEL L. GYSLING

Serial No.: 10/010,183

Filed: November 7, 2001

For: FLUID DENSITY MEASUREMENT IN PIPES USING ACOUSTIC PRESSURES

Confirmation No.:

Group Art Unit: 2856

Examiner:

Atty. Dkt. No.: 13137.0105.NPHS00

WEAF:105

SEIVED 68 2002

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents Washington, DC 20231

Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that this Supplemental Information Disclosure Statement be entered and the documents listed on the attached Form PTO-1449 be considered by the Examiner and made of Record. Copies of the listed are enclosed for the convenience of the Examiner.

Applicant is pursuing several somewhat related applications relating to flow meters, and most of the references disclosed on this Information Disclosure Statement have been cited in these various applications. In the spirit of full disclosure, Applicant believes it prudent to submit these references to the Examiner in this case for the Examiner's consideration, although some of

the references may not be as pertinent as the art of record or art of record in priority cases, if any.

Some of these references may be redundant of references already submitted in the case, and if so,

Applicant apologizes for the redundancy, but Applicant wants to ensure that the Examiner has a copy of the references.

In accordance with 37 C.F.R. §§ 1.97(g), (h), this Information Disclosure Statement is not to be construed as a representation that a search has been made, and is not to be construed to be an admission that the information cited is, or is considered to be, prior art or material to patentability as defined in 37 C.F.R. § 1.56(b).

This Information Disclosure Statement is being filed before the mailing of a First Office Action on the merits, therefore, in accordance with 37 C.F.R. § 1.97(b)(3), no fees are believed to be due. However, should any fees be deemed necessary, the Commissioner is hereby authorized to charge any additional fees which may be required to Deposit Account No.: 01-2508/13137.0105.NPUS00/LWT.

Applicants respectfully request that the listed documents be made of record in the present case, and that the Examiner initial the spaces on Form PTO-1449 to evidence the same.

Respectfully submitted,

Howrey Simon Arnold & White, LLP

750 Bering Drive

Houston, TX 77057-2198

(713) 787-1400

Date: July 24, 2002

Terril Lewis Reg. No. 46,065 Agent for Assignee

Agent for Assignee WEATHERFORD/LAMB, INC.

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Form	PT	'O- 1	1449	(modified)
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AUG 0 5 2002

Atty. Docket No. 13137.0105.NPUS00 **WEAF:105**

Serial No. 10/010,183

List of Patents and Publications for Appen

Applicant Gysling et al.

INFORMATION DISCLOSURE STATEMENT

Filing Date: 11/7/01

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(Use several sheets if necessary)

Foreign Patent Documents

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U.S. Patent Documents See Pages 1-4

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U.S. Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
th	Al	5,372,046	12/13/94	Kleven	_		
1	A2	4,862,750	9/5/89	Nice	<u></u>		
	A3	4,275,602	6/30/81	Fujishiro		(
	A4	5,576,497	11/19/96	Vignos	_		•
	A5	4,864,868	9/12/89	Khalifa)	
	A6	6,158,288	12/12/00	Smith			
	A7	5,591,922	1/7/97	Segeral			
	A8	5,367,911	11/29/94	Jewell			•
	A9	5,708,211	1/13/98	Jepson			
	A10	4,546,649	10/15/85	Kantor			
	A11	5,493,512	2/20/96	Peube			
	A12	5,845,033	12/1/98	Berthold		~	
	A13	5,741,980	4/21/98	Hill	-		
	A14	5,218,197	6/8/93	Carroll		~	
	A15	4,080,837	3/28/78	Alexander			
	A16	5,398,542	3/21/95	Vasbinder			
	A17	_5,363,342	11/8/94	Layton			
	A18	5,083,452	1/28/92	Норе			
	A19	4,114,439	9/19/78	Fick			
	A20	5,115,670	5/26/92	Shen			
	A21	4,950,883	8/21/90	Glenn			
In	A22	4,996,419	2/26/91	Morey			

Examiner:	Julen	Kurle	DATE GOOD	198703	agenta
EXAMINER: INITIAL I	F REFERENCE CONS	IDERED, WHETHER OR NOT CI	TATION IS IN CONFORMA	NCE WITH MPEP609; DRA	W LINE THROUGH
CITATION IF NOT IN CON	IFORMANCE AND N	OT CONSIDERED. INCLUDE CO	PY OF THIS FORM WITH I	NEXT COMMUNICATION TO	APPLICANT.



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Atty. Docket No. 13137.0105.NPUS00 WEAF:105 Serial No. 10/010,183

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Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
Tol	A23	5,317,576	5/31/94	Leonberger	_		
	A24	5,401,956	3/28/95	Dunphy			
T	A25	5,426,297	6/20/95	Dunphy		-	
	A26	5,513,913	5/7/96	Ball		_	
	A27	5,564,832	10/15/96	Ball			
	A28	5,493,390	2/20/96	Varasi			
	A29	3,851,521	12/3/74	Ottenstein			
	A30	4,445,389	5/1/84	Potzick			
	A31	4,520,320	5/28/85	Potzick		-	
	A32	5,040,415	8/20/91	Barkhoudarian			
	A33	4,932,262	6/12/90	Wlodarczyk		-	
	A34	4,896,540	1/30/90	Shakkottai)	
	A35	5,207,107	5/4/93	Wolf			
	A36	4,159,646	7/3/79	Paulsen			
	A37	5,925,821	7/20/99	Bousquet		_	
	A38	4,236,406	12/2/80	Reed			
	A39	_4,16,4,865	8/21/79	Hall			
	A40	4,144,768	3/20/79	Andersson)	
	A41	5,639,667	6/17/97	Heslot		_	
	A42	5,842,347	12/1/98	Kinder	1	_	
	A43	3,149,492	9/22/64	Weinberg		-	
the	A44	4,515,473	5/7/85	Mermelstein			

Examiner:	delan	Curk	DATE CONTIDENED 108/03
EXAMINER: INITIAL IF	REFERENCE CONS	IDERED, WHETHER	OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH
CITATION IF NOT IN CONF	ORMANCE AND N	OT CONSIDERED. I	NCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

Information Disclosure Statement — PTO-1449 (Modified)



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Atty. Docket No. 13137.0105.NPUS00 WEAF:105 Serial No. 10/010,183

List of Patents and Publication Ap

Information Disclosure Statement

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Applicant

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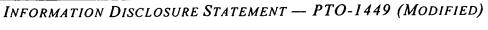
See Page 5

Other Art
See Page 6

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Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
IR	A45	4,706,501	11/17/87	Atkinson	-		
7	A46	4,976,151	12/11/90	Morishita			
	A47	5,024,099	6/28/91	Lee		}	
	A48	5,031,460	7/16/91	Kanekobu		}	
	A49	5,361,130	11/1/94	Kersey)	
	A50	5,440,932	8/15/95	Wareham			
	A51	5,670,720	9/23/97	Clark)	
	A52	5,680,489	10/22/97	Kersey)	
	A53	5,058,437	10/22/91	Chaumont		}	
	A54	5,730,219	3/24/98	Tubel		}	
	A55	5,732,776	3/31/98	Tubel			
	A56	5,803,167	9/8/98	Bussear			
	A57	5,906,238	5/25/99	Carmody			
	A58	5,959,547	9/28/99	Tubel		_	
	A59	5,975,204	11/2/99	Tubel)	
	A60	5,992,519	11/30/99	Ramakrishnan)	
	A61	5,926,690	12/7/9	Shaw			
	A62	6,002,985	12/14/99	Stephenson			
	A63	5,321,991	6/21/94	Kalotay			
	A64	5,644,093	7/1/97	Wright			
	A65	5,907,104	5/25/99	Cage		_	
K	A66	5,939,643	8/17/99	Oertel			

Examiner:	delen	Kurk	DATE CONSIDERED: 128/07
EXAMINER: INITIAL	IF REFERENCE CO	SIDERED, WHETHER OR	NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH
CITATION IF NOT IN CO.	NFORMANCE AND	NOT CONSIDERED. INCL	UDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.



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Atty. Docket No. 13137.0105.NPUS00 WEAF:105 Serial No. 10/010,183

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KIZ	A67	5,347,873	9/20/94	Vander Heyden		}	
	A68	5,908,990	6/1/99	Cummings)	
	A69	5,051,922	9/24/91	Toral			
	A70	4,499,418	2/12/85	Helms		1	
	A71	4,947,127	8/7/90	Helms			
	A72	5,956,132	9/21/99	Donzier)	
	A73	6,003,383	12/21/99	Zielinska)	
	A74	6,003,385	12/21/99	De Vanssay		_	
	A75	4,788,852	12/6/88	Martin)	
	A76	4,813,270	3/21/89	Baillie)	
	A77	4,884,457	12/5/89	Hatton			
	A78	5,099,697	3/31/92	Agar			
	A79	5,654,551	8/5/97	Watt)	
	A80	6,216,532	4/17/01	Stephenson)	
	A81	5,925,879	7/20/99	Hay			
	A82	6,009,216	12/28/99	Pruett		(
	A83	5,689,540	11/18/97	Stephenson)	
	A84	5,963,880	10/5/99	Smith		_	
	A85	5,804,713	9/8/98	Kluth			
	A86	5,597,961	1/28/97	Marrelli			
	A87	5,152,181	10/6/92	Lew		~	
1gc	A88	6,279,660	8/28/01	Hay			

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Examiner:	Idden	Kurle	DATE CONSIDERED
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CITATION IF NOT IN	CONFORMANCE AN	D NOT CONSIDERED. INCLUDE	COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

Information Disclosure Statement — PTO-1449 (Modified)



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Atty. Docket No. 13137.0105.NPUS00 WEAF:105 Serial No. 10/010,183

List of Patents and Publications for Applicant

Applicant Gysling et al.

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Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
R	A89	6,642,098	6/24/97	Santa Maria			
1/	A90	6,016,702	1/25/00	Maron		~	
- \ -	A91	6,354,147	3/12/02	Gysling			
12	A92	6,233,374	5/15/01	Ogle			

Foreign Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No
KZ	B1	WO 96/04528	2/15/96	WIPO			
1	B2	FR 2 357 868	7/7/76	France			No
	В3	JP 406082281	9/1/92	Japan			Yes
	B4	WO 93/14382	7/22/93	WIPO			
	B5	DE 19511234	12/7/95	Germany		~	No
	В6	WO 00/00793	1/6/00	WIPO		-	
1/2	B7	EP 0684458	5/15/95	Europe			
-	B8						

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Exam. Init.	Ref Des.	Citation
KX	Cl	Mesch, F. (1990) "Speed and Flow Measurement by an Intelligent Correlation System", Advances in Instrumentation and Control, Research Triangle Park, NC, part 4, p.1899-1914.
182	C2	Specification for US Patent Application Serial No.09/345,827, filed 7/2/99, Attorney docket: WEAF:060.

Examiner: Line Curlo

DATE CONSIDERED: 1/28/03

EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

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Atty. Docket No. 13137.0105.NPUS00 WEAF:105 Serial No. 10/010,183

List of Patents and Publications for Applications

Applicant
Gysling et al.

Information Disclosure Statement

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Filing Date: 11/7/01

Group: 2856

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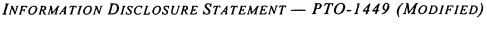
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Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation	
182	C3	Specification for US Patent Application Serial No.09/346,607, filed 7/2/99, Attorney docket: WEAF:057.	
KR	C4	Specification for US Patent Application Serial No.09/740,760, filed 11/29/00, Attorney docket: WEAF:072.	
R3	C5	Specification for US Patent Application Serial No.09/326,097, filed 6/4/99, Attorney docket: WEAF:047.	
KIR	C6	Specification for US Patent Application Serial No.09/519,785, filed 3/7/00, Attorney docket: WEAF:061.	
147	C7	Specification for US Patent Application Serial No.09/346,606, filed 7/2/99, Attorney docket: WEAF:071.	
195	C8	Specification for US Patent Application Serial No.09/346,605, filed 7/2/99, Attorney docket: WEAF:078.	
B	С9	Specification for US Patent Application Serial No.09/344,069, filed 6/25/99, Attorney docket: WEAF:106.	
\$P	C10	Gysling, D. (1999) "Development of a Fiber Optic Downhole Multiphase Flow Meter", in "Field Applications & New Technologies for Multiphase Metering", Multiphase Technology Series Conference, Aberdeen, Scotland.	
102	C11	Beranek, L. and Ver, I. (1992) in "Noise and Vibration Control Engineering, Principles and Application", John Wiley & Sons, Inc., Chapter 14, p:537-541.	
区	C12	Dowling, A. and Williams, J. in "Sound and Sources of Sound", Ellis Horwood Limited, Section 4, p:79-80	
K	C13	Kersey, A. et al. (1993) "Multiplexed Fiber Bragg Grating Strain-Sensor System with a Fiber Fabry-Perot Wavelength Filter", Optics Letters, 18:1370-1372.	
(/2	C14	Dandridge, A. & Cogdell, G. (1991) "Fiber Optic Sensors for Navy Applications", IEEE, LCS, 2:81-89.	
12	C15	Nielsen, R. (1991) "Sonar Signal Processing", Artech Huse Inc., Chapter 2, p:51-59.	

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Examiner:	Juli	Kuck	DATE GOLDIDERE
EXAMINER: INITIAL	L IF REFERENCE CONS	IDERED, WHETHER OR	NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH
CITATION IF NOT IN C	ONFORMANCE AND N	OT CONSIDERED. INCL	UDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.





AUG 0 5 2002

Atty. Docket No. 13137.0105.NPUS00

Serial No. 10/010,183

List of Patents and Publications

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Applicant Gysling et al.

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Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation		
W.	C16	Krim A. and Viberg M. (1996) "Two Decades of Array Signal Processing Research", IEEE Signal Processing Magazine, p:67-94.		
K	C17	Kersey A. and Darkin, J., Editors (1992) SPIE Vol. 1586, "Distributed and Multiplexed Fiber Optic Sensors", p:1-243.		
(03	C18	Nerby et al. "A cost effective technique for production well testing", (1995) Offshore Technology Conference, p:505-515.		
0	C19			

EXAMINER:

delan Kulk

DATE CONSIDERED

EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

